

SPECIFICATION

- o Amend paragraph [0008] as follows:

[[The]] In one embodiment, the present invention comprises a dedicated wireless data connection to the Internet (e.g., via cellular access technologies) through which digital broadcasts may be streamed to mobile devices specifically designed to receive and play the content of the broadcasts. [[The]] In this embodiment, the invention utilizes a hand-held mobile terminal device specifically designed for the reception and playback of Internet radio wirelessly and, in accordance with this embodiment of the present invention, the content available to the user of the device is automatically pre-specified based upon the connection node (e.g., a cellular base station) with which the device is currently communicating. The device creates and maintains a wireless connection to the Internet through any existing access technology (e.g., cellular or Wi-Fi access technology), manages the connection, including roaming, and buffers data in order to present a continuous stream of content to the end-user. Thus, for example, the hand-held mobile terminal device of this embodiment of the present invention can receive Internet radio "broadcasts" from the Philadelphia region when connected to a communication node serving the Philadelphia area, and will receive Chicago area "broadcasts" when connected to a communication node local to the Chicago area. Using this model, local advertisers and/or stations can pay the wireless service provider to have their content broadcast in a particular region, thereby enabling regional advertising to be delivered to listeners. The user of the device can switch from station to station within the area using pre-set buttons or other designation means, with the specific broadcast to be associated with the pre-sets dictated by the local communication node.

- o Amend paragraph [0014] as follows:

FIG. 1 illustrates the overall system and general environment of one embodiment of the present invention. Referring to FIG. 1, a first city 102 and second city 104 are illustrated. These cities could represent any cities, for example, adjacent cities in the same state, one city on the East Coast and one city on the West Coast, or two cities on different continents.

- o Amend paragraph [0016] as follows:

As illustrated in FIG. 1, cellular tower 110 is logically coupled to a server 112. The server 112 is associated with a content provider and is the source (via a standard internet connection, for example) for the content that will be made available to listeners via cellular tower 110. In accordance with this embodiment of the present invention, the content provider who controls server 112 can lease at least one RF band on the cellular radio tower 110. This enables the content provider to deliver several "stations" (e.g., 20 to 40 stations, depending upon the basic operation of a particular CDMA cell). Each "station" has a unique spreading code and thus is separately "tuneable".

- o Amend paragraph [0018] as follows:

FIG. 2 illustrates an example of the overall structure of a hand-held mobile terminal device in accordance with one embodiment of the present invention. It is understood that the example in FIG. 2 is merely an illustration that shows the functional elements that would be found in any hand-held mobile terminal device in accordance with this embodiment of the present invention and the present invention is not limited to the configuration illustrated therein.

Referring to FIG. 2, a hand-held mobile terminal device 202 comprises a housing which houses a speaker 204, on-off switch 206, display 208, tuning control 210, volume control 212, a headphone jack 214, and interactive function button 216. An antenna 218 is provided to increase the reception available by the device in a well-known manner.

- o Amend paragraph [0021] as follows:

The hardware utilized to fabricate the handheld mobile terminal device can comprise off-the-shelf components, many of which are already found in a standard cellular telephone. By constructing a simple device as shown in FIG. 2, and controlling the operation of the device as described herein with software, the benefits of this embodiment of the present invention are achieved.

- o Amend paragraph [0031] as follows:

As noted above, the present invention also allows transmission of certain information, e.g., commands, from the receiving device back to the cellular transmission tower. In cellular telephone systems, an uplink channel is a channel shared by all subscribers dedicated solely for uplink activities and is typically used to request call set-up for mobile initiated calls. This use of uplink commands in this embodiment of the present invention allows the system to be interactive. The user of the hand-held mobile terminal device can, for example, express interest in a song, artist, commercial, etc. by pressing a button on the hand-held mobile terminal device (e.g., the interactive function button 216 of FIG. 2 or a GUI button displayed on the hand-held mobile terminal device). For example, during the playing of a song, the user can press interactive function button 216 which is interpreted by the system as the user expressing interest in the song. The system reacts by sending email to the user providing pertinent information, for example, the name of the CD and where it can be purchased at a local store, a coupon for purchase, venues where the band singing the song will be playing and where tickets may be purchased, and the like. Implementing this aspect of this embodiment of the present invention involves creating or modifying software code to create the various specific messages and facilitate the control functions designated by the user of the handheld device.

- o Amend paragraph [0032] as follows:

FIG. 3 is a flowchart illustrating an example of the basic steps performed in accordance with one embodiment of the present invention. It is understood that all steps are not required and that additional steps may be included and still fall within the scope of the present invention. Referring to FIG. 3, at step 302, a hand-held mobile terminal device comes into range of a cellular tower configured to provide Internet radio as described above, thereby acquiring the tower signal. At step 304, a determination is made as to whether or not it is a multi-channel signal or a single channel signal. If it is determined that a multi-channel signal is being delivered by the cellular tower, then at step 306, one of the channels is selected, for example, by selection of a keypad setting by the user of the hand-held mobile terminal device. The process then proceeds to step 308.

- o Amend paragraph [0035] as follows:

FIG. 4 illustrates an example of steps performed, in accordance with one embodiment of the present invention, when a user of a hand-held mobile device of one embodiment of the present invention activates the interactive function button 216 illustrated in FIG. 2. At step 402,

the uplink signal is received ~~[[form]]~~ from the hand-held device, triggered by activation of the interactive function button. Among the information transmitted with the uplink signal is information identifying the subscriber (step 404). This will allow the station owner to associate the request with that user so that, for example, requested information resulting from the activation of the button can be delivered to the correct subscriber.

- o Amend paragraph [0036] as follows:

At step 406, the uplink signal is correlated with the control function with which it is associated. The uplink signal can be a single signal that triggers a single function (e.g., there is only one function associated with the activation of the interactive function button); it can be a single signal that activates a particular function dependent upon the timing of the activation (e.g., if activated during a song it might tag the song for identification to the subscriber by a subsequent email; if activated during a commercial it might send the subscriber information about the advertised product or service, etc.); it can be multiple signals, selected from a dropdown list, each of which triggers the performance of a different function (e.g., one selection might tag a song for subsequent identification; another might ask for concert information regarding the performer of a song playing; another might request a set list of all songs played in the last hour, etc.). Any information available to the station owner that can be requested by the subscriber can be provided, simply by programming a processor controlled by the station owner to provide the information requested.